

Amendments to the Drawings:

The attached sheet of drawings includes changes to FIGS. 4(a)-4(c). In FIGS. 4(a)-4(c), each label “substance name” is changed to “substance data name” and each label “substance position” is changed to “substance data position.”

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

REMARKS

I. Status of the Application

By the present Reply, the Applicant is amending claims 1-4, 6-10, and 13. No new matter is added. Claims 1-13 are currently pending in the application. Claims 1-13 have been rejected. The present Reply addresses each point of objection and rejection raised in the Office Action. Favorable reconsideration is respectfully requested.

II. Statement of Substance of Interview

The Applicant thanks the Examiner for conducting a personal interview with the Applicant's undersigned representative on May 13, 2010. The substance of the interview is recorded herein in Sections IV-VI.

It is respectfully submitted that the instant STATEMENT OF SUBSTANCE OF INTERVIEW, including the substance recorded below, complies with the requirements of 37 C.F.R. §§1.2 and 1.133 and MPEP §713.04.

III. Objection to the Drawings

The Examiner has objected to FIGS. 4(a)-4(c) because paragraph [0032] of the original specification refers to reference numeral 33 as a substance data name, while FIGS. 4(a)-4(c) label reference numeral 33 as "substance name." Similarly, paragraph [0032] of the original specification refers to reference numeral 34 as a substance data position, while FIGS. 4(a)-4(c) label reference numeral 34 as "substance position." The Applicant is amending FIGS. 4(a)-4(c)

for consistency with the specification. Accordingly, the Applicant respectfully requests that the Examiner withdraw the objection to the drawings.

IV. Objection to the Claims

The Examiner has objected to claims 1-3 and 13 because of alleged informalities. The Applicant is amending the claims to clarify the distinction between initial search data comprising search tree data having a tree structure and a plurality of sets of first substance data specified based upon the search tree data, and update search data comprising a set of second substance data. During the personal interview, the Examiner agreed that this amendment would overcome the objection to the claims.

With regard to the negative limitations referenced by the Examiner, the Applicant notes that paragraph [0033] of the original specification states that “the update data are not transmitted in a format that will include a search tree and substance data” (emphasis added). Further, paragraph [0057] of the original specification states that “[w]hen search data have been updated, only the updated substance data are transmitted together with the corresponding index, instead of updating the entire search data main body constituted with a search tree and the substance data specified based upon the search tree” (emphasis added). Therefore, the Applicant submits that the specification provides ample support for the recited limitations. Further, as discussed in MPEP §2173.05(i), there is nothing inherently ambiguous or uncertain about a negative limitation.

During the personal interview, the Examiner agreed that these limitations are proper and supported in the original specification.

According to the Examiner, in claims 1, 3, and 13, “determining which facility information from which database should be used is critical or essential to the practice of the invention, but not included in the claim(s)” (Office Action, page 6). The Applicant respectfully disagrees. As discussed in paragraph [0066] of the original specification, “if the substance data in the extracted substance record and the substance data in the update data match,” only the substance data in the update data may be brought up on the display. If the data match, it is unnecessary to determine which facility information from which database should be used. Therefore, the Applicant submits that such a feature is not critical or essential to the practice of the invention.

V. Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 3, and 13 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. In particular, the Examiner maintains that the distinctions between the different types of search data are unclear. As discussed above, the Applicant is amending the claims to clarify the distinction between *initial search data* comprising search tree data having a tree structure and a plurality of sets of first substance data specified based upon the search tree data, and *update search data* comprising a set of second substance data. During the personal interview, the Examiner agreed that this amendment would overcome the indefiniteness rejection. Therefore, the Applicant respectfully

requests that the Examiner withdraw the rejection of claims 1, 3, and 13 under 35 U.S.C. § 112, second paragraph.

V. Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-5 and 9-13 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Publication No. 2002/0013658 to Tanaka et al. (“Tanaka”) in view of U.S. Publication No. 2003/0028316 to Miyahara (“Miyahara”) and U.S. Publication No. 2002/0052894 to Bourdoncle et al. (“Bourdoncle”). Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tanaka, Miyahara, and Bourdoncle in view of U.S. Publication No. 2003/0140309 to Saito et al. (“Saito”). Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tanaka, Miyahara, and Bourdoncle in view of U.S. Application Publication No. 2003/0231163 to Hanon et al. (“Hanon”). The Applicant respectfully traverses these grounds of rejection.

As discussed above, the Applicant is amending claims 1-4, 6-10, and 13 to improve clarity. Support for these amendments can be found at least in FIGS. 3-6 and paragraphs [0007], [0032], [0033], [0037]-[0045], and [0057] of the original specification. As amended, independent claim 1 recites:

An update method performed by a server and a control device of a navigation apparatus for updating search data used in the navigation apparatus, the update method comprising:

providing, by the server, initial search data comprising search tree data having a tree structure and a plurality of sets of first substance data specified based

upon the search tree data, wherein the first substance data include facility information;

providing, by the server, update search data comprising a set of second substance data, wherein the second substance data are stored in a non-tree structure, have an index as a search key, include facility information, and do not include data specified based upon search tree data, separately from the initial search data and without updating a set of the first substance data in the initial search data or adding a set of first substance data to the initial search data; and

executing, by the control device, a substance data search by using a tree-based search based on the search tree data of the initial search data and an index-based search using the index of the second substance data.

As discussed in the Reply dated October 13, 2009, Tanaka discloses that both the original search data (shown in FIG. 7A) and the new search data (shown in FIG. 7B) have a tree structure. Therefore, Tanaka fails to teach or suggest that “the second substance data are stored in a non-tree structure, have an index as a search key, include facility information, and do not include data specified based upon search tree data,” as recited in claim 1. (emphasis added). Further, Tanaka fails to teach or suggest executing “a substance data search by using a tree-based search based on the search tree data of the initial search data and an index-based search using the index of the second substance data,” as recited in claim 1 (emphasis added). On the contrary, as the Examiner acknowledges in the Office Action, Tanaka does not disclose second substance data that have an index as a search key, or using the index to execute an index-based search.

In addition, the Applicant submits that Miyahara fails to remedy the deficient teachings of Tanaka. Miyahara merely discloses that map data

includes a group of layers, each of which is divided into blocks (§ [0081]). To update the map data, individual layers or blocks may be replaced with new data (§ [0083]). Therefore, Miyahara does not teach or suggest providing initial search data and update search data *separately*, as recited in claim 1. Further, as the Examiner acknowledges in the Office Action, Miyahara fails to teach or suggest executing “a substance data search by using a tree-based search based on the search tree data of the initial search data and an index-based search using the index of the second substance data,” as recited in claim 1.

Also, the Applicant submits that Bourdoncle fails to remedy the deficient teachings of Tanaka and Miyahara. Bourdoncle discloses a searching tool for searching and retrieving information on the Internet. In one embodiment, a database of entries is provided, and the entries are mapped to a set of categories (§ [0022]). The categories may be organized in a tree structure (§ [0070]). In another embodiment, the database may include an inverted index, in which the categories are entries of the inverted index (§ [0027]). However, Bourdoncle does not teach or suggest separately providing initial search data (comprising search tree data having a tree structure and a plurality of sets of first substance data specified based upon the search tree data) and update search data (comprising a set of second substance data that are stored in a non-tree structure and have an index as a search key), as recited in claim 1. Further, Bourdoncle fails to teach or suggest executing “a substance data search by using a tree-based search based

on the search tree data of the initial search data and an index-based search using the index of the second substance data,” as recited in claim 1.

The Applicant submits that claim 1 is patentable over Tanaka, Miyahara, and Bourdoncle for at least the reasons discussed above, as well as its additionally recited features. Because independent claims 3 and 13 recite features similar to those discussed above with regard to claim 1, the Applicant submits that claims 3 and 13 are patentable over Tanaka, Miyahara, and Bourdoncle at least for similar reasons, as well as their additionally recited features. Further, claims 2, 4, 5, and 9-12 are patentable over Tanaka, Miyahara, and Bourdoncle at least by virtue of their respective dependencies on claims 1 and 3, as well as their additionally recited features.

Further, Saito and Hanon fail to remedy the deficient teachings of Tanaka, Miyahara, and Bourdoncle, and are not cited as allegedly disclosing the features discussed above. Therefore, claims 6 and 7 are patentable over Tanaka, Miyahara, Bourdoncle, and Saito at least by virtue of their dependencies on claim 3, as well as their additionally recited features. Further, claim 8 is patentable over Tanaka, Miyahara, Bourdoncle, and Hanon at least by virtue of its dependencies on claim 3, as well as its additionally recited features.

VI. Conclusion

If there are any questions regarding this Reply or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 029267.58056US.

Respectfully submitted,

June 2, 2010

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